

REMARKS

Applicants have now had an opportunity to carefully consider the Examiner's comments set forth in the Office Action mailed November 4, 2004. The clarity of the Office Action is noted with appreciation. Reexamination and reconsideration of the application are respectfully requested.

The Office Action

In the Office Action mailed November 4, 2004:

Notice was provided that the office records do not include the corrected formal drawings that the Applicants believe were submitted along with Applicants' Amendment A on November 17, 2003;

Claims 1, 4-6 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,164,842 to Gauronski, et al. ("Gauronski") in view of U.S. Patent No. 3,936,180 to Willard, et al. ("Willard") and U.S. Patent No. 5,483,223 to Austin, et al. ("Austin"); and

Claims 9 and 11-14 were rejected under 35 U.S.C. §103(a) as being unpatentable over Gauronski, Willard, Austin and U.S. Patent No. 6,011,940 to Van Lydegraf ("Van Lydegraf").

In the Drawings

The Office Action indicates that the office records do not include the replacement sheets the Applicants believe were filed with the Applicants' Amendment A on November 17, 2003. Accordingly, replacement sheets including corrections to formal FIG. 3 and FIG. 4 are being submitted herewith.

In FIG. 3, the words --Generate A-- in box 224 are being replaced with the words --Submit The--. Additionally, an extra flow line is being deleted from the lower right corner.

In FIG. 4, the word --When-- in box 254 is being replaced with the word --About-- and the reference numeral 224 is being added. Additionally, an extra flow line is being deleted from the lower right corner.

These changes correct errors made during the creation of Formal Drawings and bring the figures into agreement with the originally filed informal drawings. As such, the replacement sheets do not include new matter.

The Present Application

By way of brief review, the present application is directed to digital printing systems wherein main job production progress is monitored so that sample copies of parts of the main job, that are designated critical or the representative of the job as a whole, can be produced on a regular interrupting basis (Abstract).

Job specifications are collected 204. These specifications include, for example, the source for the images to be printed, the number of pages to be printed, which, if any, are to be printed in color, which, if any, are to be printed in high resolution, the size and kind of media on which they are to be printed, etc. A collection of critical or representative parts of the job is also collected 206. The collection is a list of parts of sheets, sheets or compilations of sheets. Additionally, sample intervals for each critical or representative part are collected 208. The sample intervals indicate how often during the production of the main job, samples of each critical or representative part should be produced.

For example, a sample interval specification might be set so that a sample of a particular sheet is produced at a sample location, such as a sample/purge tray, each time 25 copies of that sheet are produced at the main job location. Another part of the main job, less prone to error, might be sampled each time 100 copies are produced, or every twenty minutes during the main job production.

For instance, each time one of the critical or representative parts of the job is being processed, a counter is incremented. The value in that counter is tested to see if it corresponds to the sample interval specified for the incident part. If the value of the counter does correspond to the sample interval, a sample job description is generated 222 and submitted 224 to a job fulfillment process 202. The sample job is processed and the counter is reset. (page 7, line 15 – page 8, line 30).

The Cited References

In contrast, the primary reference of the Office Action to Gauronski discloses an electronic printer with a scanner for scanning document pages of a job and converting the document images scanned to pixels, a printer for making prints of the documents from the pixels in accordance with job programming instructions, the scanner and printer operating asynchronously with respect to one another, and interruption of a job to process a special job is effected by interrupting the job

currently being scanned by the scanner to scan the special job while continuing printing of other jobs in the print que. When the special job is ready, the job is interrupted to print the special job, while scanning of the interrupted job is resumed. Printing of the interrupted job continues upon the completion of the special (Abstract).

With regard to disclosure in Gauronski of an interrupting job, it is respectfully submitted that the proof job of Gauronski is scanned and inserted in the print que each time the proof job is desired. When scanning of the proof job is sufficient to enable printing to begin, the proof job is inserted into the succession of jobs in the print que for printing at the earliest possible moment (column 7, lines 36-39). Whereas, the sample jobs recited in **claim 1** are specified once and produced on an ongoing basis, at, for example, a predetermined interval. It is respectfully submitted that Gauronski does not disclose or suggest such a sample job specification for producing proof or sample jobs on an ongoing basis.

Willard discloses a xerographic apparatus with "sample" print capabilities. Under certain circumstances, an auxiliary feed path is created to direct pages to a sample print tray. Paper deflecting fingers are provided to divert pages to the sample tray under the control of the operator in response to one of four conditions. The Office Action implies that the disclosure in Willard, that the depression of the SAMPLE PRINT button will generate a command whereby the page being then printed will be directed to the sample print tray, and the disclosure in Willard, that the controller is programmed to cause reprinting of that page and the delivery of the reprinted page to the paper receiving station (column 1, lines 63-68), is equivalent to specifying an interrupting job, that is a sampled job comprising a component of the main job. However, the Applicants respectfully disagree.

It is respectfully submitted that the depression of a SAMPLE PRINT button, whereby a page being printed will be directed to a sample print tray is not a disclosure or a suggestion of preselecting at least one representative part of a main job, specifying a sample job production interval for the at least one representative part, interrupting the main job, producing the sample job and resuming the main job as disclosed and claimed in the present application.

For example, a job specification process begins with a collection of job specifications. These specifications include, for example, a source for the images to be printed, the number of pages to be printed, which if any, are to be printed in color,

which if any are to be printed in high resolution, the size and kind of media, on which they are to be printed, etc. (page 7, lines 15-21, page 8, lines 31-34).

Austin allegedly discloses a system and method for the automatic selection of printer operating parameters using a preprinted barcode image on a portion of a selected print medium or a separate sheet of bar code parameters and commands. The bar code image specifies characteristics of the selected print medium. A bar code scanner operates in conjunction with a bar code printer and scans the bar code image (Abstract).

It is respectfully submitted that Austin is non-analogous art with respect to the claims of the present application. One concerned with developing a method for producing interrupting jobs during the processing of a main job in a document processing apparatus, would not look to Austin.

Even if Austin is analogous art, Austin does not include the subject matter asserted by the Office Action. The Office Action alleges that Austin discloses providing a sample at predetermined intervals. The Applicants respectfully disagree.

Instead, Austin asserts that the bar code system can automatically adjust the printer operating parameters to compensate for changes in the print engine or environmental changes, such as ambient temperature changes. For example, a verifier of Austin continuously scans the output images and the printer optimizer of Austin dynamically adjust the printer operating parameters. This allegedly compensates for changes in print quality resulting from changes in the ambient temperature. Austin further notes that it is not necessary to scan every output image to verify the quality of the output image. Rather, the system can sample (i.e., take measurements of) the output image and statistically determine the quality of the output images. A sampled output image can be analyzed at predetermined periods of time, such as every five minutes, or at predetermined intervals, such as every tenth output image (column 10, lines 18-33). Austin suggests analyzing or measuring main job output at predetermined intervals. However, Austin does not disclose or suggest providing a sample job or print.

Van Lydegraf allegedly discloses embodiments of an electrophotographic printer, each embodiment having a paper exit system for collating convenience copies separate from the printed pages from a host device's job. The exit system includes a first paper path and a second paper path joining at a junction, with a

rotating member that operates in the junction to direct the paper to the first path or to the second path, either by contacting and turning the paper or by allowing the paper to proceed unobstructed. The rotating member is controlled by an interrupt/queuing logic system and a mechanical switch that automatically rotates the rotating member when an interrupting convenience copy is started, so that the convenience copies will travel to the opposite path and housing port and those being used for the current, host's job. Once the interrupting job is done, the logic system automatically switches the rotating member back to its original position (Abstract).

The Office Action relies on Van Lydegraf for disclosure of an exit system, wherein an interrupting job is output to a different exit port than an interrupted main job.

The Claims are not Obvious

Claims 1, 4-6 and 10 were rejected under 35 U.S.C. §103(a) as being unpatentable over Gauronski, Willard and Austin. In explaining these rejections, the Office Action stipulates that Gauronski does not disclose specifying a sample job including preselecting at least one representative part of the main job or specifying a sample interval for the at least one representative part. The Office Action relies on Willard and Austin for disclosure of these elements.

The Office Action asserts that Willard discloses a mode of operation for a printer where a currently running main print job is interrupted in order for a sample page of said print job to be sent to a sample tray. However, it is respectfully submitted that the page sent to the sample tray is not a sample job. Instead, it is a randomly selected page from the main print job (i.e., whatever page is being printed when the operator presses the "sample print button"). In this case, the depression of the sample print button will generate a command whereby the page being then printed will be directed to the sample print tray (column 1, lines 63-66). In this regard it is respectfully submitted that Willard does not disclose or suggest preselecting at least one representative part of the main job and specifying a sample job production interval for the at least one representative part.

The Office Action also asserts that Austin discloses the providing of a sample at predetermined intervals. However, the Applicants respectfully disagree. Instead, as indicated above, it is respectfully submitted that Austin suggests measuring ("sampling") aspects of main job output at predetermined periods of time, such as

every five minutes, or at predetermined intervals, such as every tenth output image (column 10, lines 18-33).

Furthermore, it is respectfully submitted that even if Austin disclosed providing a sample at predetermined intervals, the combination of Gauronski, Willard and Austin does not disclose or suggest preselecting a specific portion of a main job for repeated production. As indicated above, it is respectfully submitted that Willard does not even disclose or suggest diverting a particular portion of a main job. Instead, the depression of the sample print button of Willard generates a command whereby the page that happens to be being printed at that moment is directed to the sample print tray. Austin measures the quality of whatever image is being printed or is within the field of view of a sensor when the sample interval expires.

For at least the foregoing reasons, **claims 1 and 10**, as well as **claims 4-9**, which depend from **claim 1**, are not anticipated and are not obvious in light of Gauronski, Willard and Austin taken alone or in any combination.

Claims 9 and 11-14 were rejected under 35 U.S.C. §103(a) as being unpatentable over Gauronski, Willard, Austin and Van Lydegraf.

Claim 9 depends from **claim 1** and is not anticipated and is not obvious for at least that reason.

Claim 11 recites, among other things, wherein the at least one computing platform is operative to receive a job specification, a predetermined representative part specification and a sample interval associated with the predetermined representative part specification and to control the plurality of machine modules to produce a job according to the received job specification and to produce samples according to the representative part specification at intervals determined by the sample interval specification. Arguments similar to those submitted in support of **claim 1** are submitted in support of **claim 11**. As stipulated by the Office Action, Gauronski does not disclose or suggest generating samples of a main job. It is respectfully submitted that the diverted sheet of Willard is selected randomly and is not predetermined and is not necessarily representative of the main job. For example, the main job may include many halftone images, while the randomly selected page may include only text. It is respectfully submitted that the measured images of Austin are those that happen to be rendered or in the field of view of the sensor when the measurement interval expires. Gauronski, Willard, Austin and Van Lydegraf do not disclose or suggest receiving a predetermined representative part

specification and a sample interval specification associated with the predetermined representative part specification.

For at least the foregoing reasons, **claim 11**, as well as **claims 2-14**, which depend therefrom, are not anticipated and are not obvious in light of Gauronski, Willard, Austin and Van Lydegraf taken alone or in any combination.

Telephone Interview

In the interests of advancing this application to issue the Applicant(s) respectfully request that the Examiner telephone the undersigned to discuss the foregoing or any suggestions that the Examiner may have to place the case in condition for allowance.

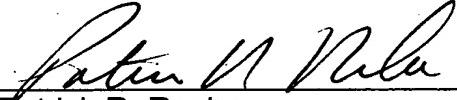
CONCLUSION

Claims 1, 4-6 and 9-14 remain in the application. **Claims 1 and 10** have been amended. For at least the reasons detailed above, it is respectfully submitted that the claims are in condition for allowance. Accordingly, an early indication thereof is respectfully requested.

Respectfully submitted,

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